

# INTRODUCTION TO THIS SPECIAL ISSUE ON PROBLEM-BASED LEARNING IN ASIA

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A remarkable event took place in Kaohsiung, Taiwan, in July 2007: 60 medical students studied medicine for 3 days. That by itself doesn't sound remarkable, but once you know the students arrived in Kaohsiung from medical schools in seven different countries, were immediately divided into eight groups with each one also containing a faculty member from one of five different countries, and that they worked through four different problem-based learning (PBL) cases in 3 days, you start to get a better sense of the atmosphere of the event.

Aside from the student participants from the host school, Kaohsiung Medical University, none of these students had done PBL together before, nor had any of them worked with their assigned faculty tutor. The work was fast, spirited and highly cross-cultural. This cross-cultural element was true in several dimensions:

- the national origin of the students and faculty: Taiwan, Hong Kong, Japan, Korea, Singapore, Hungary and the United States;
- the location of their home medical schools: the countries listed above as well as Poland for several of the Taiwanese students.

This variation meant that every case in every group was viewed from many different perspectives, because of variations in individual and cultural views of the patients and problems presented, because of the different health care systems each student and tutor knew best, and because each school which uses PBL in their curriculum often has a very local adaptation of this educational technique.

The result of such a large variation could have been chaos, but instead, the participants experienced something like a distillation of the essence of PBL. By this, I mean that to work effectively together, each group had to quickly find a way to work together to get the most out of the experience. As a result, we had something like a laboratory experiment in which we could find the often hidden dynamic that seems to drive PBL work the strongest.

Before introducing some of the lessons learned from this experience and before introducing the articles in this special edition of the *Kaohsiung Journal of Medical Sciences*, we should acknowledge those who made this event possible. The workshop itself arose out of discussions in 2006 with Chung-Sheng Lai, MD, PhD, Dean of the College of Medicine at Kaohsiung Medical University. But to pull this event together, he needed the strong support of Hsin-Su Yu, MD, PhD, President of Kaohsiung Medical University, as well as an effective organizing committee. Their leadership and support was felt clearly throughout the workshop, and it was their enthusiasm for the work they observed that led to this special edition. I have great respect for their willingness to take a risk on such an experiment and to provide the support that made it a success.

So what did we, as academic faculty, learn from this experiment? Each of the tutors was invited to write on an aspect of PBL that this workshop made most meaningful to them. As a result, in this special edition you will find some unique and significant contributions to the literature of PBL. Given the origins of PBL in North America and its early adaptation in a number of European schools, the English-language PBL literature primarily focuses on PBL in those educational and cultural contexts. But, over the last decade, the dramatic growth of PBL in medical schools across Asia means significant adaptations are being



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made, and these authors are some of the first to capture what those adaptations look like.

One lesson from this workshop is how natural the PBL process is for medical students. Given their differences, PBL provides a structured environment in which students can quickly bring out their inherent passion for learning, stimulating each other, enriching each other, and quickly bonding around their shared goal of caring for patients in need. In other words, if you need to quickly help students from different cultural, educational and social contexts discover in what ways they are similar and what ways they are alike, PBL is one of the most effective means to do that. Matthew Gwee, in his article on the cross-cultural implications of PBL, goes several steps further, discussing the many ways in which PBL can and cannot mesh with many of the values found in Asia.

Two other papers discuss some of the sources of this *naturalness* of PBL. Nan-Chieh Chen discusses PBL in the context of the Structuralism and Pragmatism schools of philosophy, using bioethics as an example of the natural utility of PBL. Shin-Yun Wang and his colleagues provide a very thorough examination of the roots of PBL in the context of the educational techniques of Socrates and the *truth* conception of the philosopher Karl Popper.

The second lesson was the significance of the actions and behavior of the tutor in quickly shaping each group's ability to optimize their PBL performance. Although the workshop tutors might not use the term *active* in describing their own form of tutoring, they all indeed demonstrated an ability to accelerate their group's learning through the use of questions and challenges as well as attention to group dynamics. This experience became the springboard for Li Chong Chan's reflection on the role of the tutor, working not so much from a philosophical position, but a highly practical one. How well tutors succeed at their work is reflected in the original contribution of Cheng-Sheng Chen and colleagues as they evaluated performance anxiety of a sample of the students participating in the workshop.

The third lesson is how significantly the atmosphere in which PBL is done affects the passion for learning of the participants. In this workshop, the only purpose of meeting as a group was to share a love of learning. There were no tests on the material covered, there were no conflicting demands on student time, every student and tutor was there because they wanted to

be there, and the only use of large-group lectures was to amplify understanding of material covered by the case. In this sense, there were none of the usual barriers students and faculty report when they find PBL difficult, inefficient or unsatisfying.

This experience helps us to see the usual pattern of curriculum development in a new light. Most often, PBL is added to a curriculum without evaluation of the ways in which other elements of the curriculum can actually interfere with the successful delivery and use of PBL. This suggests an alternative framework for curriculum development: it can be not so much an act of constructing something as it is the act of removing barriers to learning.

This framework becomes most clear in the articles by Yasutomo Oda and Shunzo Koizumi from Saga Medical School in Japan and Yuzo Takahashi from Gifu University in Japan. Each is a leader in the use of PBL within their schools and each one is discussing ways in which they think PBL can become as effective as possible in the context of their varied curricula.

The fourth lesson is the degree of flexibility learning from a problem can provide. While the focus of the workshop was small-group learning, we found an unexpected opportunity for whole-group learning that proved to be quite valuable. We had been working through a very rich PBL case on pandemic flu written by Seiji Yamada, with students developing learning issues across the usual spectrum of biological and clinical domains. Working with one of his Hawaiian students and a Hawaiian colleague, Yamada discusses the impact of teaching preparedness to a range of health care practitioners through the use of this PBL case.

This case also evoked memories of the recent tragedy of SARS in the region, a public health dilemma in which many of the workshop participants had some first-hand experience. As the memories of this experience became clear, there was a suggestion we organize a whole-group session focusing on the bioethical issues the SARS experience posed to health care practitioners. As a result, the real concerns, fears and quandaries that physicians faced during that period could be shared and discussed meaningfully by people who will in all likelihood face a similar situation in the future, and who will need the kind of international relationships and understanding that this workshop was meant to foster.

I'll end this introduction in three ways. First, by urging you to see how these authors can influence your use and development of PBL. Secondly, by expressing gratitude to Dr Lai and Dr Yu and all of those students and faculty who participated in the

event that spawned this special edition. Finally, I encourage all of us to foster the use of cross-cultural interaction as part of our efforts to improve our medical education methods, frameworks, and goals of enhancing the health and wellbeing of those around us.